5.—Aboriginal man in southwestern Australia

By D. Merrilees¹, W. C. Dix¹, S. J. Hallam², W. H. Douglas³ and R. M. Berndt²

Abstract

Firm evidence from excavations demonstrates that Aborigines have been present in southwestern Australia for about 25,000 years. However, findings from excavated and non-excavated sites could appreciably extend this time-depth to show a much earlier human occupation. Many of these sites are of major scientific importance. Some are listed and located on an accompanying map. One criterion for classifying them is their original nature or use: e.g., ceremonial sites, stone arrangements, hunting devices, rock engravings, quarries, and surface scatter or artefacts. They are now subject to legislative protection. A topographical archaeological approach based on field survey with selective excavation, supplemented by ethno-historical evidence, provides an ecological perspective on the interaction of southwestern Aboriginal populations, through time, with their environment. A special focus here is on the Perth area, particularly in relation to surface artefact assemblages.

The focus then shifts to the contemporary and near-contemporary scene. Various languages and dialects were spoken in this area, but intensive alien contact led to the emergence of one, Njungar (Nyungar), as a general southwest language. Its phonological grammatical and lexico-semantic characteristics are outlined. The final paper sketches traditional south-west Aboriginal socio-cultural life at the beginning of European settlement. In the wake of that settlement came rapid depopulation and, within fifty years or so, destruction of the traditional systems. Out of this physical, psycho-social and cultural wreckage, have come the mixed Njungar people of Aboriginal descent who now seek an Aboriginal identity of their own.

Introduction

These five papers are devoted to a consideration of what can be called the south-west Aboriginal heritage. Three sorts of data are involved. 1) The archaeological approach takes as its point of departure surviving Aboriginal sites through which the past can be explored. It is building up a picture of Aboriginal settlement that can be related to the situation in other parts of this continent. 2) Because systematic anthropological research was undeveloped during the early settlement of the south-west, reliance has had to be placed on the often incomplete and subjective evidence of the earlier recorders. It is therefore impossible, at this point in time, to obtain a deep understanding of traditional Aboriginal life in this area. These early sources, however, do afford valuable insights. 3) On the other hand, it has been possible to reconstruct aspects of the sociocultural past from the often fragile memories of elderly Aborigines. And with this, is direct

anthropological research into the contemporary situation, among persons of Aboriginal descent who have more associations with the wider Australian society than they have with their Aboriginal forbears.

The range of accumulating data on the southwest Aborigines, from the far-distant to the near-past and to the present-day, even though so much information is missing, adds up to something approximating an overall statement. And in summarized form, this is what is presented here. Traditionally, these Aborigines belonged to a non-circumcising area: this fact alone placed them, anthropologically speaking, in a minority position vis- \dot{a} -vis other Australian Aborigines. They also possessed some unique or distinctive characteristics which separated them conceptually from the others. In the process of intensive contact, virtually all of these identifying aspects were eroded. Those which survive identify them simply as being of Aboriginal descent in a generalized sense and not distinctively as south-west Aborigines: that has been irretrievably lost.

Early human occupation of southwestern Australia

by D. Merrilees

Sites indicating early occupation

Excavation localities and other sites providing evidence of early occupation of the southwestern part of the continent are included in Figure 1. Notes on these sites are given below, with reference where possible to published information, even if only brief, or an indication of studies planned or in progress. Some of these sites are mentioned below in other contexts by other authors. Occupation sites represented by surface scatters of artefacts not readily dateable are not referred to here. Hallam (1972b) gives a relative chronology for such artefact assemblages in the Perth area.

- 5. Wilgie Mia, Aboriginal ochre mine in use from late Holocene to modern time. (I. M. Crawford, personal communication.)
- 9. Coolarburloo Pool. Artefact apparently in same geological formation as remains of large extinct marsupial and australite, though not at same site. (Merrilees, 1968b: 15) Pleistocene?
- 36. Hastings Cave. (Lundelius, 1960: as 'Drovers Cave'.) Later excavations have shown charcoal concentrations interpreted as hearths and an artefact; mid-Holocene on radiocarbon dating. (A. Baynes, personal communication.)
- 47. Caladenia Cave. Artefacts with associated faunal remains in excavation. (R. Roe and D. Merrilees, in progress.) Holecene?
- 48. Rock shelter near Gingin. Artefacts and faunal remains. (Roe 1971.) Holocene?

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Figure 1.—Sites of excavations and other sources of information on Aboriginal occupation of the south west of Western Australia from prehistoric time to early contact with European invaders. See texts by Merrilees, Dix and Haliam. The map also attempts to give a first impression of vegetation at the time of European contact and of the physiographic nature of the region. The dissected remnant of the long Darling Fault scarp sharply demarcates an eastern plateau from a low lying plain to the west. In the far south west another fault system demarcates this plain from a raised coastal block. The rivers shown are (from N to S) the Murchison, Swan-Avon and Blackwood.

- 49. Dunstan's Quarry. Douglas, Kendrick and Merrilees (1966) report site as fossil carnivore den, but presence of mussel shell and subsequent recognition of ilmestone flake as an artefact (A 17553 in Western Australian Museum collections) suggest an archaeological component. Holocene?
- 49. Orchestra Shell Cave. (Hallam, 1971b.) Roof markings, with artefacts and faunal remains in excavation. Holocene on radiocarbon dates.
- 49. Murray's Cave. (Hallam, 1971b.) Artefact and faunal remains in excavation. Holocene on radiocarbon date.
- 49. Yonderup Cave, Yanchep. Excavations by D. S. Davidson, unpublished. Some faunal remains in Museum collection. Holocene?
- 56, 65. Examples (only) of fossil lake sites in 'wheat belt'. Artefacts and faunal remains reported by Bettenay (1962). Pleistocene? Recommissance studies subsequently made by J. M. Bowler.
- 57. Frieze Cave. (Hallam, 1972b.) Excavation with artefacts, ochre. Late Holocene.

- 66. Cowaramup Point. Artefacts and faunal remains in well lithlified fossil soil, (C. E. Dortch, personal communication.) Pleistocene?
- 67. Mammoth Cave. (Merrilees, 1968b.) The main source of information on the Pleistocene fauna of the south-west, with many species now totally or locally extinct and some indication of a cilmate differing from the present (Merrilees, 1968a). Some bones charred, and investigation in progress of possibility that this charring results from man-made fires (M. Archer, I. M. Crawford and D. Merrilees). Radiocarbon date greater than 37,000 yr. B.P. reported (Lundelius, 1960), but there is uncertainty concerning the specimens to which this date refers.
- 68. Devll's Lair. (Dortch and Merrilees, 1972; 1973.) Deep deposit of 'cave earth' with artefacts, human teeth, and abundant fannal remains. Cave occupied at times by human beings. Self-consistent set of radiocarbon dates indicates man present 25,000 years ago, and bottom of deposit not yet reached. Studies continuing.

68 Strong's Cave. Human remains at shallow depth (Merrilees, 1968b). Holocene? Other caves in Cape Leeuwin - Cape Naturaliste region have yielded similar human skeletal material.

69. Coast south of Scott River. Artefacts and human skeletal and other faunal remains in blown-out dunes (Butler, 1969). Hoiocene?

79, 80. Guaralya and Wonberna rock holes, Balladonia district. Artefacts associated with faunal remains, some of extinct species, some in well lithified deposit (Merrilees, 1968b: 14). Pleistocene?

Antiquity of man in the south-west

The association of artefacts with extinct animals in a well-lithified deposit at Wonberna, a similar probable association at Coolarburloo Pool, the occurrence of artefacts in a welllithified buried soil at Cowaramup Point, artefacts at the 'wheat belt' extinct lake sites, and some of the surface occurrences of artefacts mentioned by Hallam (1972b), all suggest considerable antiquity for the human beings concerned, but no firm age estimates are available. An age estimate beyond the limit of radiocarbon dating for the sample concerned from Mammoth Cave is of uncertain application to specimens recovered from the cave, and has not yet been related unequivocally to human presence. Thus the oldest human occupation of the south-west of the continent reliably established so far is that represented in Devil's Lair at about 25,000 years B.P. The bottom of the Devil's Lair deposit has not been reached and might reveal occupation more than 30,000 years ago (Dortch and Merrilees, 1973).

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Aboriginal Art: Ceremonial and other sites in southwestern Australia

by W. C. Dix

Registration of Aboriginal sites

In 1960, the Anthropological Society of Western Australia began to prepare a list of known or reported Aboriginal sites. The Western Australian Museum undertook to maintain and expand that list, and is continuing to do so. In 1962. a Panel was formed to advise the Government on matters relating to sites. The Panel also prepared a draft of legislation which, after extensive revision, was eventually proclaimed as the Aboriginal Heritage Act in December 1972. This Act states that it is an offence to excavate, destroy, damage, conceal or in any way alter an Aboriginal site, even if it happens to be on privately owned land.

As part of the effort to protect such sites, I was appointed in 1970 Registrar of Aboriginal Sites, with supporting staff, having headquarters at the Western Australian Museum. Since then, we have embarked on a programme of verifying reports and have been exploring various methods of physically protecting the sites. In many cases, Reserves and 'Protected Areas' centring on particular places have been established.

Aboriginal sites

Some of the more significant sites listed in our index are noted on the map (Figure 1), and an indication is given below of the nature of the sites. Few have been the subject of detailed published reports. Figure 1 does not show sites from which artefacts have been collected from surface scatter unless these have been published. Locations of stores for sacred ritual objects, and sites reported in confidence, are not indicated. A number of sites which have been excavated are discussed above by D. Merrilees.

a Sacred or Ceremonial Sites: Sites now in disuse are located (in Figure 1) at 16, 18, 33. The only currently significant site shown is the complex at Weebo, 14. Focused on a banded siltstone, now called 'Weebo Stone', the site has attracted considerable publicity in recent years, and the location is generally well known.

b Stone Arrangement (not including stone structures): Authenticated arrangements are located at 4, 6, 8, 13, 15, 17, 20, 21, 27, 28, 30, 31, 32, 34, 38, 41, 43, 46, 58, 59, 63, 70, 74, 75, 76, 77.

c Hunting Devices: Many sites may have had devices for hunting, and these include some stone structures, pits, etc. The purpose of some is quite obvious, and some are known through an information link with early settlers. Fish traps are located at 54, 72, 73. Large animal traps at 71, and small animal or reptile traps at 59, 75.

d Rock Engravings, etc.: Very little engraving is in evidence, probably due to the lack of suitable material, by comparison with the north-west. Some known sites are at 1, 2, 3, 10, 49, 64, 78.

f Quarries: The well known ochre quarry at Wilgie Mia, 5, has an extensive archaeological deposit. Other ochre quarries are at 16, 29, 39, Significant quarries for stone are known at 7, 22.

g Surjace Scatter of Artefacts: Examples include those located at 5, 8, 23, 36, 37, 50, 51, 52, 53, 55.

Rejerences: Some of the sites shown on Figure 1, have been referred to, and in some cases described, in the following references:

Butler (1958)	50, 51, 52, 53, 55
Campbell (1914)	24, 25, 26
Cawthorn (1963)	8
Crawford (1963)	5, 61, 62
Davidion (1936)	12, 24, 25, 26
Davidson (1952)	3, 5, 11, 12, 24, 25, 26, 44, 60, 62
Davies (1961)	1, 2, 10, 13
Glauert (1952)	38
Gould (1968)	33, 34
Gould (1969)	34
Glover and Cockbain (1971)	24, 25, 36, 48, 50, 55, 69
Hallam (1971a,b.)	59, 49
Hallam (1972a.b.c.)	57, 64, 49
Hallam (1973)	51
Le Soeuf (1907)	60
McCarthy (1962)	11, 12, 26
Serventy (1952)	57, 60, 61, 62
Serventy and White (1958)	28
Uren (1940)	27
Woodward (1914)	5

Ecology and demography in southwestern Australia

by Sylvia J. Hallam

Pleistocene to Present

Merrilecs describes above the earliest decisive evidence for Aboriginal populations in southwestern Australia, as yielded mainly by excavations, and in particular by those in Devil's Lair (Dortch and Merrilees, 1972; 1973), which show the wide range of activities of Pleistocene Aborigines in the south-west—working bone; work-

ing wood; using steep scrapers, adze-fashion; hafting flaked tools and bone (not only at a time similar to Gould's early hafted material from Puntutjarpa [Gould, 1971], but also at a date twice as remote [Dortch and Merrilees, 1973]); utilizing, quarrying and trading a variety of raw materials, including an Eocene fossiliferous chert similar to the 'flint' quarried during the Pleistocene at Koonalda (and later from the cliffs along the Nullarbor coast, and traded hundreds of miles eastward [Wright, 1971]), and also to the chert from surface assemblages throughout hundreds of miles of the west coastal plain (Glover and Cockbain, 1971). Wilgie Mia attests to later large-scale mining and trading; while Orchestra Shell Cave and Frieze Cave provide successive exemplifications and modifications of artistic, mythic and ritual traditions in which serpents, fire, and dark crevices and caves had their part. Stone arrangements and art sites further trate that the links between Aboriginal groups and their terrain were mediated through the symbolic as well as the economic aspects of their lore and usages. What other evidence can contribute to analysis of the interacting transformations of Aboriginal life and land between the Pleistocene and European contact?

The role of topographic archaeology

The British, and above all the Cambridge, archaeological tradition has always put stress on field survey as well as excavation, although American archaeologists have only recently realized the importance of ecological and settlement studies. Like Stukcley in the eighteenth century, O. G. S. Crawford (1953), Fox (1923), Phillips (1964; 1970), Hoskins (1955), Hallam (1970), Fowler (1972), etc., show a continuing concern with distributions and settlement patterns, with the changing reactions and cumulative impact of human groups to and upon changing regional landscapes—a concern, in brief, with dynamic ecological systems, in which the exploitative, technological and symbolic activities of human societies were major components. Field archaeology, or more properly 'topographic archaeology' (Clark, 1964), comprises the investigation of 'all traces of former human activity' in the landscape. In any Australian region this would include, for example, fords, wells, water sources and their surround of much-burnt ground; yam-diggings, pit-traps, fish-weirs; tracks; belts and nodes of used and fired countryside, open parklike grazing and secondary regrowth; artefact-scatters indicating ephemeral stopovers of small hunting groups: the denser artefact-concentrations on camping-spots frequented occasionally, often seasonally or semi-permanently, by smaller or larger aggregates of folk over various timespans and for various purposes (fishing, fowling, taking frogs, turtles, lizards, small mammals, or hunting larger herbivores, digging various roots), leaving the debris of weapon manufacture, woodworking, grinding, etc.; bare sand areas cleared in getting fuel and shelter and kept clear by constant usage; devegetated areas, cleared by fire, sand-blows and mobile dunes—e.g. (see Figure 1) Williams Bay, 71a (Bermingham *et al.* 1971); Scott River, 69 (Butler, 1969); Moore River, 37 (Hallam, 1972a); as well as sites of art and ritual which patterned Aboriginal activities.

Field surveys may fall into one of several possible categories (Green, 1967): (1) Extensive reconnaissance surveys in relatively little investigated areas, drawing together scattered material, published and unpublished, are an essential preliminary to further investigation (e.g., the Anthropological Society of Western Australia, 1960; Crawford, 1963; the Aboriginal site list prepared by Miss Sarah Meagher of the Western Australian Museum in 1967-8, and amplified recently by the Registrar of Aboriginal sites, Mr. W. Dix). (2) Survey in conjunction with excavation may make clear the range and context of a certain type of site (cf. those around the Pleistocene lakes of N.S.W. [Bowler 1971: Bowler et al. 1972; Barbetti and Allen 1972]). (3) Problem-oriented surveys concentrate on one particular type of site over a wide area (e.g., Dix's study of stone arrangements [see above]; the art studies of Davidson [1952], Crawford, Bruce Wright, McCaskill, etc.). (4) Intensive surveys 'designed to extract all possible information from each site found' and recognizing the necessity for 'as complete a random sample as possible' must necessarily be relatively localized, but should preferably be sufficiently extensive to include the normal range of a local group and investigate shifts in the demarcation of culture areas. Such systematic field studies have been most effectively adumbrated and pursued in the east and north of Australia (cf. McBryde, 1962; 1973, etc.; Lampert, 1971a.b; Stockton, 1970; 1972; and Dortch, 1972) but have been relatively lacking in the South-West (cf., however, Butler, 1958; Akerman, 1969; Bignell, 1971); and valuable local amateur studies are in progress of both the archaeological and the folk evidence of Aboriginal occupation and of the relationship of early European to Aboriginal settlement (e.g. by Gardner near Northcliffe, and Mrs. Roe in the Gingin-Moore River area).

Topographic studies in southwestern Australia

Dr. John Glover* investigated artefact-scatters on the coastal plain in order to define the distributions and proportions of a lithologically-peculiar, exotic raw material (see above), which he found to occur in exposures (e.g. in Figure 1, near 24-5, 36, 37, 48, a concentration of sites around 53-5, and 69) in dune blows mostly overlooking interdunal swamps and lakes (Glover and Cockbain, 1971). No site east of the Darling Fault has yielded more than a few flakes of this Bryozoan chert. It is most abundant, on the whole, on sites near the west of the coastal plain. This suggests a derivation for the Perth Basin material, perhaps from sources now offshore since the rise in sea-level which ended

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around 3000 BC [Churchill, 1959; 1960] in caves or river channels penetrating through Pleistocene deposits into the underlying Eocene. Churchill (1959; 1968) discusses evidence that the Swan River cut a channel down to around 50 m below present mean sea-level, and was still at around — 20 m by 7000 BC. Assemblages composed almost exclusively of this fossiliferous chert are also typologically distinctive, comprising flakes, chips, flaked pieces, and a great variety of scrapers—nosed, concave and convex, including many with a steep edge angle and adze-type utilization (e.g. 37; Hallam 1972a). At 37, the fact that there are only two backed blades in the group of artefact scatters suggests that this assemblage, and the similar component in other coastal plain assemblages, is early (i.e. prior to the general floruit of backed-blade assemblages from around 2000 BC [cf. Gould, 1971; Hallam, 1972a,b]).

European glass, sherds, clay pipes, etc., on some sites show that a few continued to be occupied from the early ('pre-blade') phase, through into the middle ('backed-blade') and late ('post-blade') phases, and a very few into the final brief phase after European contact. The analysis of such multi-phase occupations is aided by study of one-phase sites: for example, the early assemblages described above, or the many relatively amorphous late assemblages with a high proportion of quartz chips. Differences due to date must be distinguished from those due to group size, span and frequency of occupation, or exploitative function, as indicated by extent, density of material, presence or absence of grinding equipment; and from regional differences in facies between sites of the same phase. Each assemblage can thus be assigned to a phase or series of phases; and the distribution of numbers and sizes of sites in relation to ecological zones can be analyzed for each phase. Changes over time indicate changes in overall population density, patterning into splitting and aggregating groups, and stress on the different resources which ethno-historical evidence shows to characterize the different zones.

The Perth area project

The Australian Institute of Aboriginal Studies and the University of Western Australia are supporting a survey comprising a transect from the coast eastward to beyond the Avon, centred on the Swan estuary (Hallam, 1971b; 1972a,b,c; 1973). It is too soon to presage full results, but certain trends are suggested by a pilot survey of about 120 sites clustered into about 70 groups and over 10,000 artefacts.

Increasing numbers of sites per unit timespan on the coastal plain show increasing Aboriginal usage and populations. The 'early' coastal groupings using Eocene chert were confined to the (then wider) plain west of the Darling Scarp; later and 'contact' groups, on the evidence both of material distributions and of early European observers, ranged farther east into the good grazing land along the scarp foot and into the Darling Range; with intensive late

usage of the resources of interdunal lakes and swamps.

By contrast, the typologically early (cf. Lampert, 1971a,b) chopper/steep scraper assemblages of the Avon Valley and eastward (e.g. 10 sites in the Grass Valley-Quellington area, —c.55) are richer in numbers, amount of material, and variety of types, relative to later assemblages, than on the coastal plain. They differ in material (largely doloritic) and typology (with their many high-backed 'core' scrapers) from the coastal assemblages, though sharing steep edge and in-biting use wear; and extend west to the foot of the Darling Scarp (e.g. 48a, 50). The line of demarcation between coastal and inland-oriented groups would seem to have shifted eastward with the rise of the sea level, by about 3000-2000 BC. There are relatively fewer and sparser 'middle' and 'late' assemblages inland. I have suggested (1972b; 1973) that the less wooded inland areas offered initially more abundant grazing, supporting high animal and early human populations; that firing will have improved the openness and grazing potential of the 'open woodland' on the inland margin of the forest zone, and also on its coastal fringe. During the drier phase which ensued from before 2000 BC (Churchill, 1968; Gould, 1971), the inland zones proved incapable of supporting as steep a rise of population as the coast, being more sensitive to aridity and possibly also to increased salinity as a result of deforestation. Dr. C. A. Parker* (personal communication) suggests that depletion of nitrogen could be another effect of burning. Burning would, however, continue to develop rather than deplete the grazing resources of the better-watered alluvial piedmont zone, which Stirling was to find open and park-like in 1829; while the more varied fish, fowl, reptile, small mammal, root and water resources of the estuaries, inlets, lakes, and swamps of the coastal plain continued to support steeply increased usage and populations right up to European contact.

Any regional survey must take into account the archaeological and ethno-historical evidence of the symbolic (artistic-mythic-ritual) as well as the technological and economic aspects of the knowledge and skills, the cognitive lore, by which Aboriginal groups grasped and developed the potentialities of their home terrain, creating an ecological system which alien newcomers were to take over (Hallam, 1972c; 1973). Immediately following, Douglas discusses language, which was the mould for these cognitive patterns, and Professor Berndt discusses Aboriginal sociocultural patterns in traditional terms and under European impact.

The language of southwestern Australia

by W. H. Douglas

Introduction to the 'Nyungar' language

Variant manifestations of the South-West language have been referred to in the historical

*Department of Soil Science and Plant Nutrition, University of Western Australia. records. Several of the variants are still known today by older speakers of what may be named generically 'Nyungar', which is also the word for 'man' in the language of the south-west. G. O'Grady (in O'Grady and Voegelin, 1966: especially p. 130ff.) has listed four of these dialects as Wadjuk, Balardong, Wardandi, and Minang and indicates that the principle sources of information on these variants are Grey (1840), Moore (1842), Salvado (1850; 1886), and Bates (1914) among others (see Oates and Oates, 1970). Later investigators include O'Grady and Hale in 1958 and 1960. A description of the language as it is spoken today was prepared by Douglas in 1968.

Other known variants of the language include Bibbulman, Kaniyang, Mirnong, Tjapanmay and Kwetjman, all of which names were spelt in diverse ways in the older records (see map in Figure 3). This Nyungar group (Douglas 1968: part 1) contrasted in vocabulary and grammatical structure with Watjari in the north (the boundary today being roughly marked by the Garaldton to Mt. Magnet railway line); with the Western Desert language to the north-east: and with Ngatju or Marlpa in the east (see von Brandenstein 1970). Descendants of the original speakers of the South-Western language number approximately 8,000 today. Many of these, however, have a very restricted knowledge of genuine Nyungar, but speak what the author has labelled 'Neo-Nyungar' (Douglas 1968: 8), a hybrid speech which contains vocabulary items and idiomatic constructions from the original language placed into English grammatical constructions.

The phonological dimension

Orthography: Investigators in the past have used a variety of spelling devices to record this previously unwritten language. In the present description the following symbols, arranged according to point and manner of articulation, have been used:

(Consonants				Vowels
b	dj	d	/d	g	i u
m	nj	n	/n	η	
	lj	1	/l		e o
		r	/r		
w		У			a

A stroke / preceding a letter indicates retroflexion.

The consonant phonemes: There is a series of voiceless unaspirated stops occurring at the labial, dental, alveolar, cerebral and velar points of articulation. The cerebral is retroflexed. A series of nasals occurs at the same five points of articulation. There are three contrastive

laterals—dental, alveolar and cerebral. The two central continuants are the alveolar, which is allophonically flapped and trilled; and the cerebral, which is retroflexed. The semi-vowels are the labio-velar /w/ and the alveolar /y/.

The vowel phonemes: The language at present has a five-vowel system. There is contrast between front and back with the high and mid phonemes, the front vowels being unrounded, the back rounded. The low vowel is central and open.

Prosodic features: Syllable stress is predictable and non-phonemic. Primary stress occurs on the first syllable of multi-syllabic words. E.g., gudjal 'two', nindalinj 'scorpion'. In reduplicated forms there is equal stress on the first syllable of each component stem: e.g., gudjal-gudjal 'four'.

The general syllable structure is CV or CVC (with C representing 'consonant' and V 'vowel'): e.g., $\eta u \eta u / lala$ 'black cockatoo', dadj 'meat'. V and VC may occur initially, followed by CV or CVC: e.g., aliwa 'beware', idjinj 'to lay (an egg)'. There is also a CVNC syllable in which N represents a nasal which assimilates to the same point of articulation as the final consonant: e.g., $\eta a \eta g$ 'mother'/'sun', $\eta u / n / d$ 'chest body part)'.

The grammatical dimension

Nyungar grammatical structure is simple when compared with northern members of the Pama-Nyungan family, in which there are highly complex verbal systems.

The verb does not carry tense, but has the choice of two aspects—'completed action' and 'incompleted action'. Tense is indicated by the use of a series of time words, phrases or dependent clauses, when required.

The noun and pronoun rarely take more than one suffix at a time. Transitive subject marker and direct object marker are used only to avoid ambiguity or to supply a subtle emphasis. For example:

yog-il mam baminj woman-subject male hitting

— 'The woman is hitting a man.'

(Emphasis on Subject.)

mam yog-inj baminj male woman-object hitting

— 'The man is hitting the woman.'

(Emphasis on Object.)

yog gudjal geb ba/raninj woman two water fetching

- 'The two women are fetching water.'

(Subject apparent.)

Other inflexional suffixes include the 'locative' -ag (as in bu/nag 'on the tree/log'); 'instrument' -ag/-al (as in bal bu/n godjag baminj. 'He (was) hitting the tree with an axe.' [godj 'axe']). 'Reason' is indicated by $-a\eta$ (as in bal $ga/ra\eta$ $njuna\eta$. 'He is angry because of you.' [njun 'you']).

The basic clause level constructions are the transitive and intransitive command and statement type clauses and the equational (including the stative) clause type. Expansions of these clauses include the addition of vocative, time, manner, instrument, reason (cause, purpose) and indirect object or benefactive which may be manifested as single words, relator axis phrases or as dependent clauses.

The lexico-semantic dimension

Words: Vocabulary range in old Nyungar could have been quite extensive. Although material culture was not highly developed, knowledge of nature—especially of edible and non-edible plants, animals and fish—was rich in detail. Hunting terminology was also extensive, as were the vocabularies in connection with religious culture, social organization and law.

Phrase words: Body parts feature largely in certain noun phrases which have become descriptive idioms. For example:

gad wa/ra (lit. 'head-bad') 'stupid'.

 $dwa\eta g$ bu/d (lit. 'ear-less') 'unreasonable', 'ignorant'.

ma/da gidj (lit. 'leg-spear') 'bony-legged', 'skinny' (derogatory).

gobu/l wi/d (lit. 'stomach-empty') 'hungry'.

Clause words: Many metaphors, similes, idioms and other figures of speech have survived the clash with the alien language and some of them, as has been mentioned, have found their way into the English of the South-West. Among these are such expressions as:

 $ba/da\eta inj$ $yo\eta ga$ muginj—'hopping like a kangaroo' (used in various contexts).

njidinj gwiya/r muginj—'cold as a frog' (also used in various contexts).

ge/d-ge/d gu/linj (lit. 'running swiftly')—
'darting here and there', 'purposeless'.

geba naninj (lit. 'water-drinking')—now used for 'liquor drinking'.

Discourse analysis of any exhaustive nature has been impossible because of the limited amount of text-material now available, but traditional narratives which have been collected show the Nyungar ability to use all the subtleties of story-telling. Dramatic presentation, mystery and humour are not lacking; nor are cleverness of characterization and development of plot.

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Aborigines of southwestern Australia: The past and the present

by Ronald M. Berndt

Pre-European population

For information on traditional Aboriginal life in the south-west of this State, we must rely on early records which are not detailed and are anthropologically unsatisfactory. The pre-European population could have approximated 6,000 persons—if we take the boundary as a line drawn diagonally from Esperance to Mullewa. This boundary marks off the non-circumcising zone (see Map on Figure 2), that is, the southwestern corner of the State. If, however, we include adjacent tribes farther inland (within the circumcising area), the population could not have been much less than 7,500. Moore (1884: 115) reported that in 1840 there were about 3,000 Aborigines in the Swan River Colony alone. Radcliffe-Brown's (1930a) estimate of 12,500 Aborigines in the south-west at the time of first settlement is possibly too high (see Makin, 1970: Chapter 5).

The southwestern people felt the full force of the disastrous impact of European settlement. Against that, their traditional life could not survive—not as a living, coherent entity.

Traditional social organization

The 'true' south-west Aborigines, then, did not practise circumcision. However, a merging of social units occurred quite early during the contact period, when members of different tribal groups were obliged to live on mixed-tribal settlements. The map on Figure 2 shows the positioning of 13 'tribal' divisions (after Tindale, 1940) south-west of the circumcision boundary. In 1967, Douglas (1968) located 11 of these; 5, and perhaps 6, of them fall within the circumcisional area: see map on Figure 3. Tindale's list depends on old sources, Douglas's on the memory of elderly persons of Aboriginal descent. Douglas's interest is in language, and these 'tribal' names are really labels and/or dialectal divisions which in toto can be classified today as Njungar, or Nyungar, a word meaning 'man' or 'person'.

The internal organization of south-west tribal units was quite diverse. According to Radcliffe-Brown (1930b: 216-19, 220-21, on the basis of Moore, 1842; Salvado, 1851 and 1886; Bates, 1914 and 1923; among others), there were four patterns for this relatively small region (see map on Figure 4). Area 'C' had matrilineal moieties named manitymat and wardangmat ('white cockatoo' and 'crow'), with at least four exogamous matrilineal divisions (or clans) grouped under each moiety. Their names had 'totemic' associations. Moore (1842: 4) speaks of them as 'family names': four principal ones, 'resolved again into many local or subdenominations', several grouped under 'one leg', others under another 'leg' and so on. However, this requires further discussion. Ritual affiliation was through the father. The pattern as described by Bates (1923) suggests local patrilineal descent group centring on totemic sites, with mythic connections and correlated with specific stretches of country. Thus, a person belonged to the moiety and totemic clan of his (or her) mother, but also to the local group of his (or her) father. Within the father's land division, a person's conception (or birth) totem, a particular natural species, was mythically defined vis-à-vis a centre which was, in turn, the focus of ritual. Area 'B' had a similar social organization, except that the named moieties were patri-

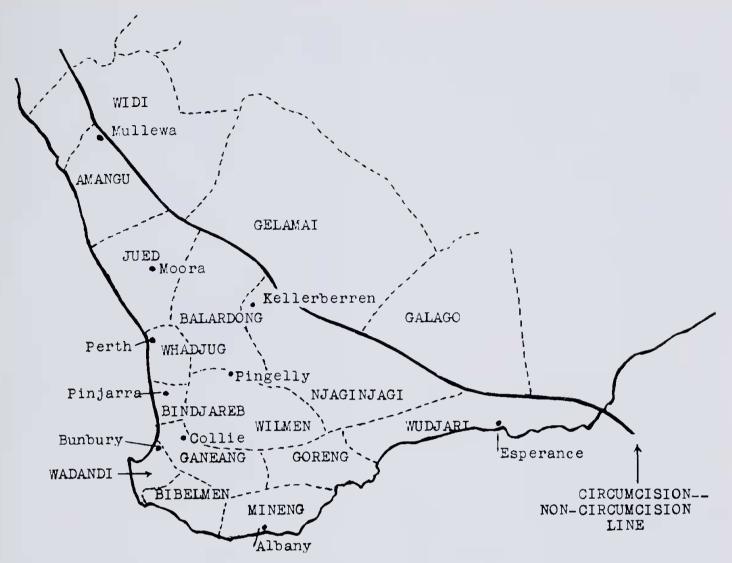


Figure 2.—"Tribal" map of the south west, after Tindale. 1940; tribal names slightly altered.

lineal. Area 'D' had two alternating 'endogamous moieties' named birangumat and djuamat ('kingfisher' and 'bee-eater'). These, however, seem to be alternating generation levels similar to the traditional Western Desert type (see R. and C. Berndt, 1964/68: 56-8). The main focus was on patrilineal local descent units. Area 'A' seems close to Area 'D', with the addition of named totemic groups (probably patri-local descent units).

Generally, the south-west Aborigines were deeply attached to their country through mythoritual ties. As in other parts of Aboriginal Australia, the local descent group was concerned with religious matters, while the socio-economic unit (a mixed-membership group) moved over limited stretches of territory, hunting and food-collecting. Communication was kept open between members of different territories or districts (subtribal or otherwise). These took structural shape in the *mandjar* or 'fair', when Aborigines met to barter a wide range of goods. People living in the Perth area exchanged commodities with those from the Murray River on the south, and also with others from the north.

Cultural background

Environmental and climatic conditions in the south-west made it necessary for Aborigines to protect themselves against They constructed bark-covered huts winters. which Hammond (1933: 25) described as watertight. Also, they made buka (cloaks), such as were used in southeastern Australia: three or more kangaroo skins, specially treated, were sewn together with sinew or rush and worn with the fur side inward. Distinctive to this area were the kangaroo skin bags used by women: the goto, used generally, and the gundir, for carrying a small child. And the kadjo 'hammer' was a unique implement, broad and blunt at one end and sharp-edged at the other: it was affixed to a short thick stick by means of prepared tudibi, Xanthorrhoea gum.

Initiation was fairly simple, and the major operation involved piercing the nasal septum. The novice was red-ochred during the rites and was given a hairstring, cloak and weapons (Bates, 1923; 236-7). Hammond (1933; 63) mentions that, although there was no circumcision rite in this area, the name of a place near Albany meant 'circumcision site'. He reports the





Figure 3.—"Tribal" map of the southwest, after Douglas, 1968.

belief that this operation would have spoilt the natural erection of the penis—but a modified form of the rite, discontinued in the early 1870's, was the removal of the tip of the foreskin.

Salvado (1850) noted that the Aborigines 'hide carefully from strangers their customs and, in particular, their beliefs'. From the evidence, it would appear that increase rites were held by local groups, and that a reasonably large body of mythology existed, some of which was expressed ritually. Salvado mentioned Motogen (which he translates as god), as a creative being. He also referred to myths about the Sun and Moon, the Morning Star and the great Rainbow Snake. Moore (1842: 103) wrote of 'a large

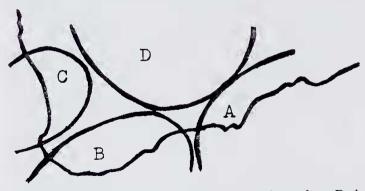


Figure 4.—Social organizational categories, after Radcliffe-Brown, 1930 (map facing p. 42). A.—without moieties and sections, but named patri-totemic units. B.—patrilineal moieties. C.—matrilineal moieties and totemic clans, with patri-local descent units. D.—named pairs of sections or alternating generation levels.

winged serpent' called Waugal, living in 'deep dark waters', who was especially inimical to females but was feared generally as being instrumental in bringing sickness. A similar mythic snake emerged at Mt. Eliza and, crawling its way to the sea, created the Swan River. Mt. Eliza and the high ground where the State Parliament House now stands were called Ga-ra-katta, the site sacred to this snake (see Moore, 1884, and Makin, 1970).

was a man, the sun The moon (miga) (nganga) a female. A cave at York had a circular figure cut into the rock face, with hand stencils: this was said to have been 'visited' by Moon (Moore, 1842: 35). Many stars, too, were mythic beings (or mythic beings had 'turned into' stars). Bulgut, a wife of Tdadam or Dedam, was one. Dedam had a sister (of the same name) whom he speared when she allowed his two children to stray: they were represented by stars, and so was the spear. And the star Djingun was a wife of Wurdytch or Wurdoitch. Julagoling, the planet Venus, was an attractive young woman who carried out sorcery. Hammond (1933: 64-5) gives a story of a large tree located east of Northam which was used by mythic eagles who stole human babies to feed their young: the tree was eventually burnt down in revenge.

There was also quite a wide range of dances. However, their significance has not been noted by early recorders. The dtowalguorryn, for example, was common among people living in the eastern sector of this area; the yallor came from the north; the kanggarak from the south; the yuyltunmitch (direction unspecified); and the venma from the north and north-east. The yenma is undoubtedly the well-known Western Desert inma, a general term for an ordinary ceremony. The yallor was performed mainly by men, only occasionally by women. They dramatized hunting scenes and the actions of various animals, birds and reptiles, along with the feats of sorcerers. Men were elaborately decorated, wearing ornamental sticks in their hair. It is not clear whether these were cult totemic, but the dancers were 'surrounded by groups of admiring spectators'. Salvado speaks of songs being 'handed down with a kind of traditional Hammond (1933: 49-53; 63-5) veneration'. refers to inter-tribal ceremonies during which betrothals were arranged. He gives a diagram showing how participants and onlookers were spatially arranged within a large circle; and he illustrates a serrated-edged bullroarer.

It would appear that women had more to say in tribal matters than has generally been emphasized. The custom of monyo, conferring the status of moyran (or 'grandmother') on a woman, gave her authority to arbitrate in quarrels and during armed disputes.

Consistent with the interests of early observers vis- \dot{a} -vis 'savage peoples', the material on magic and on death is more extensive. A sorcerer, for instance, was said to be possessed of boylya (power) which enabled him to fly through the sky, consume his victim's flesh, and use quartz crystal (magic stone of the shark). He was able

to raise or calm the wind, and cause rain to fall (Moore, 1842: 18-19). Salvado says that sorcery was under the guardian spirit called Cienga. The sorcerer was also a native doctor and was able to cure his patients (walbyn, to cure by enchantment).

Beliefs surrounding death were focused on releasing the deceased's spirit or soul (kadjin) from its physical vehicle, the body. There were various forms of earth burial: gotyt among the 'mountain tribes', dyuar for the 'lowland tribes'. Usually, the corpse was buried in its cloak. A native doctor was present and listened for the sound of the spirit's flight from the body. At that time, it informed him of the name of the person responsible for its death. A small hut of reeds or boughs was constructed over the grave, and a fire lit at its entrance to make the place more comfortable and home-like for the spirit. There it was believed to remain until its death was avenged (see also Nicolay, 1886: 8-10). Bates (1923: 238-40; 1927?) speaks of the kanya (soul of the newly dead) going first to the tabu-ed moojarr or moodurt tree (Nuytsia floribunda or 'Christmas' tree), where it rested on its way to Kurannup, the home of the Bipelmen dead located beyond the western sea: here, their old skins were discarded and they appeared The ancestors were spoken of as 'white'. netingar, and lived on the island of souls. The first European settlers, because of their light skin pigmentation, were believed to have come from that place: they were called djanga. 'the

Dispersal and the Njungar

The coming of 'the dead' meant death to local Aborigines. The sorry story of Aboriginal-European contact in Western Australia, especially in the south-west, between 1829-1897, has been documented by Sir Paul Hasluck (1942). Hammond (1933: 67-72), too, spells out the disaster which befell them. At first, the settlers were afraid of the Aborigines. They drove them away, destroyed their camps, burnt their huts, made it difficult for them to obtain indigenous food, and employed them as menial workers. Aborigines were threatened, shot at, and in many cases killed. Their traditional territories were no longer their own. The 'battle of Pinjarra' in 1834 was simply one of the more notorious examples which have become part of this State's history (see Neville, 1936: 10-46). Through the early years of settlement, relations between Aborigines and Europeans steadily deteriorated. Shootings, assaults and theft continued. deputation of Aboriginal leaders waited on the Lieutenant Governor of the time (Captain Irwin) in an attempt to resolve the situation but without success. The establishment of Rottnest Island prison in 1839, the removal of children from their parents, and the increasing 'mixed-blood' population, all contributed to the destruction of traditional culture. In the 1850's, 'Ticket-of-leave men and parties of convicts in the bush mixed with the natives, supplied them with drink, and there were often hideous orgies.

The dispossessed blacks had become paupers and mendicants and deterioration, already begun, proceeded apace' (Neville, 1926: 40).

The measles epidemic of the early 1880's was another 'killer', and 50 years after settlement (as Hammond puts it, 1933: 70) 'the South-West was left with scarcely a true-blooded aboriginal in it'. Traditional life had by then disappeared. By that time, too, in the early 1890's, Aborigines from other areas were drifting increasingly into the settled areas and intermixing with the remaining local inhabitants. An official Western Australian handbook (Hart, 1893: 162-71) claimed that, 'Native labour being cheap, the sheep farmer who might otherwise be unable to work his station is able to do so with profit'; but, as for Aborigines in the settled districts, 'their numbers diminish every year'. Neville (1926: 46) underlines this point: '... here in the South-West . . . between 1829 and 1901 . . . a people estimated to number 13,000 were reduced to 1,419, of whom 45 percent were halfcaste'.

The result was to leave the entire south-west with primarily a part-Aboriginal population—few of them directly descended from the original local people, most of considerably mixed Aboriginal affinity, and all possessing little or nothing of their traditional heritage. Hasluck (1939) and Neville (1948: 3-13; 1951: 274-90; 1947), among others, have provided us with surveys of local conditions. In 1948, Neville wrote (1948: 5): 'Years ago I witnessed the passing of the last of the Bibbulmen [a tribal name which he used for the whole of the south-west]. The few full-bloods now in the south-west have come from outside this district'.

It left, too, the majority of these people of Aboriginal descent living on settlement reserves, or occupying squalid camps on fringes of country towns—under the 'supervision' of the then Western Australian Department of Native Welfare. They worked spasmodically for Europeans and were, for all general purposes, culturally but not socially European-Australians. Because a tribal background was now irrelevant as far as its content and any of its details were concerned, they saw themselves as being Njungar—different from the non-Aborigines around them.

The story of discrimination and prejudice in relation to these people cannot be discussed here. However, over the last few years conditions have, at long last, been changing radically: more opportunities are now open to them. In 1967, Douglas estimated the part-Aboriginal population as 8,000 in the larger south-west region, not bounded by the non-circumcision line. In 1971, the Central Division (i.e., Perth, Moora and Kellerberrin) had a total population of 5,128. Of these, 58 were 'full-bloods' (from non-southwest areas), and 2,694 were children under 16 years (31 being 'full-blood'). The Southern Division (i.e., Narrogin, Bunbury, Gnowangerup, Albany) had a total population of 2,855. Of these, 60 were 'full-bloods' (from non-southwest areas), and 1,692 were children under 16 years (31 being 'full-blood'). The best recent studies of these people are by Makin (1970) and McKeich (1971). For general discussions, see Rowley (1970) and Biskup (1972).

Not all the south-west people of Aboriginal descent would regard themselves as Njungar. But, Njungar or not, they are New Aborigines people who seek a social identity of their own in contrast to other Australians. And part of . what they seek relates to obtaining some knowledge of their traditional past. For the southwest, unfortunately, only a very little of that knowledge survives.

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